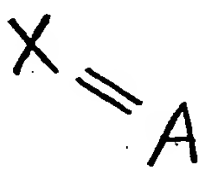
AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions and listings of claims in the above-identified U.S. patent application.

LISTING OF CLAIMS

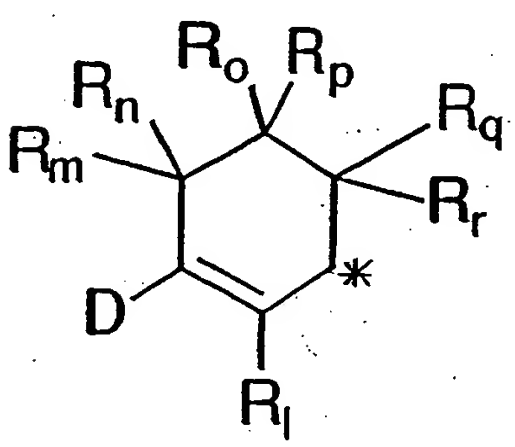
Claims 1-8. (cancelled)

Claim 9. (previously presented) A composition comprising a liquid-crystal mixture and a compound having a formula A:

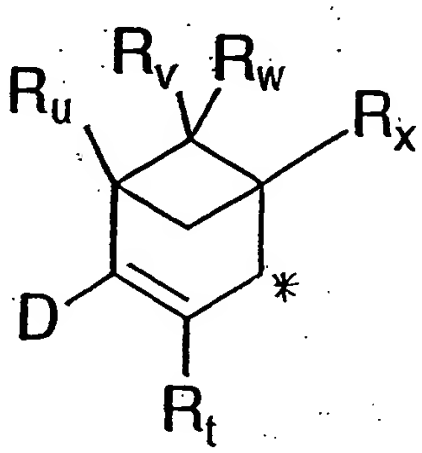


(formula A)

wherein X is selected from the group consisting of



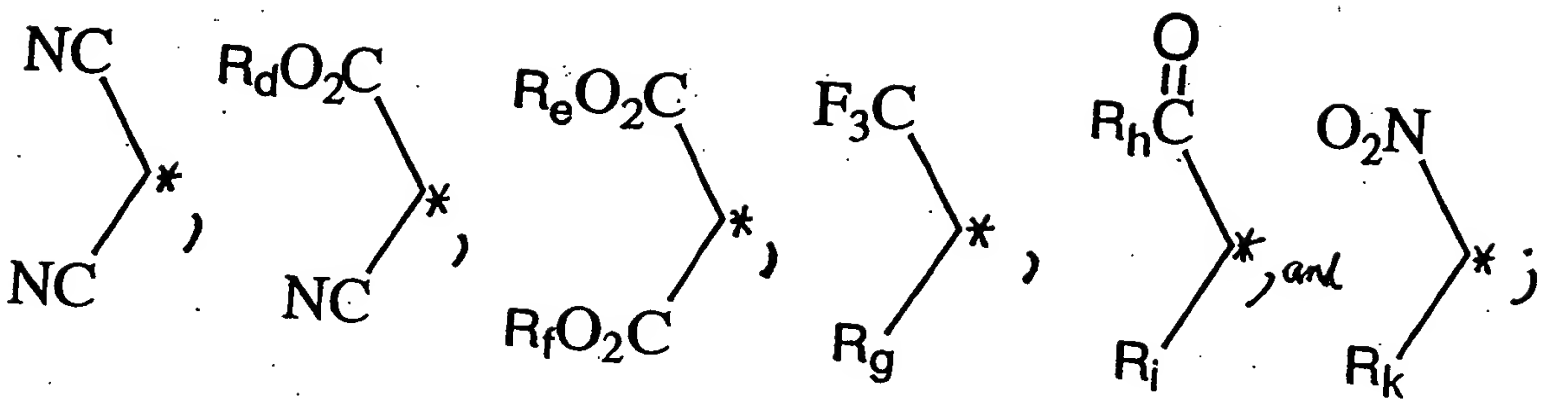
and



;

wherein D is selected from the group consisting of NR_aR_b, OR_a, SR_a, PR_aR_b, and R_c;

wherein A is selected from the group consisting of:



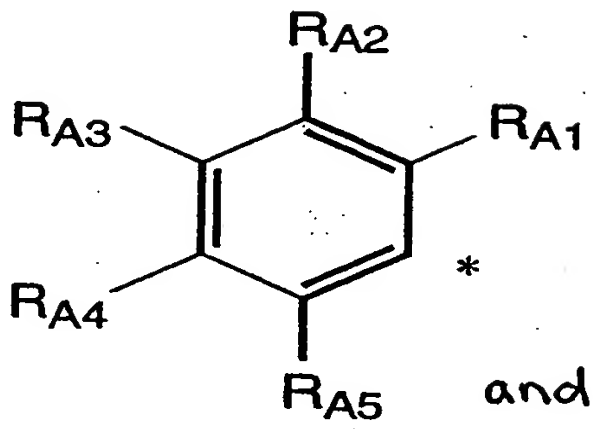
wherein R_a, R_b, and R_c are the same or different and are each independently selected from the group consisting of: H; a linear alkyl group; a branched alkyl group; a cyclic alkyl group;-$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group;

wherein R_d, R_e, R_f, R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_s, R_t, R_u, R_v, R_w, and R_x are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group; wherein the hydrocarbon group is saturated or unsaturated;

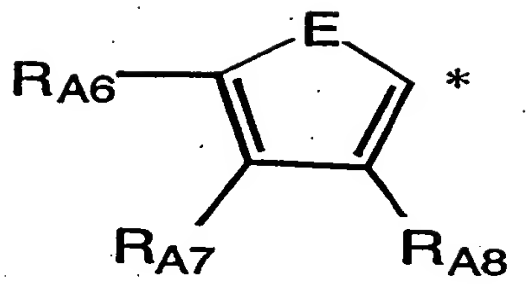
wherein R_g, R_h, R_i, and R_k are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$;-$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; an aryl group; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; -$CO_2R_d$; and -$COR_d$; wherein the hydrocarbon group is saturated or unsaturated;

wherein each aryl group is optionally independently selected from

the group consisting of



and



;

wherein R_{A1}, R_{A2}, R_{A3}, R_{A4}, R_{A5}, R_{A6}, R_{A7}, and R_{A8} are the same or different and are each independently selected from the group consisting of H, a linear alkyl group, a branched alkyl group, and a cyclic alkyl group;

wherein E is selected from the group consisting of S, O, and NR_s;

wherein the alkyl group is optionally substituted or unsubstituted and optionally includes up to 25 carbon atoms;

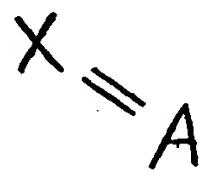
wherein α is an integer that is greater than or equal to 0 and less than or equal to 25;

wherein β is an integer that is greater than or equal to 0 and less than or equal to 25; and

wherein γ is an integer that is greater than or equal to 0 and less than or equal to 25.

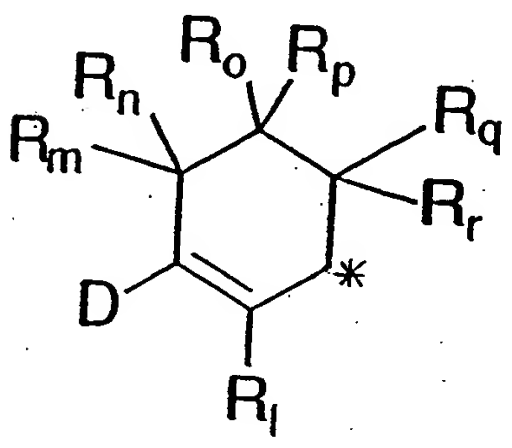
Claim 10. (original) A composition as claimed in Claim 9, wherein the compound comprises less than or equal to about 50% by weight of the composition.

Claim 11. (previously presented) A method for reducing an operation voltage of a liquid-crystal mixture, the method comprising adding to the liquid-crystal mixture a compound having a formula A:

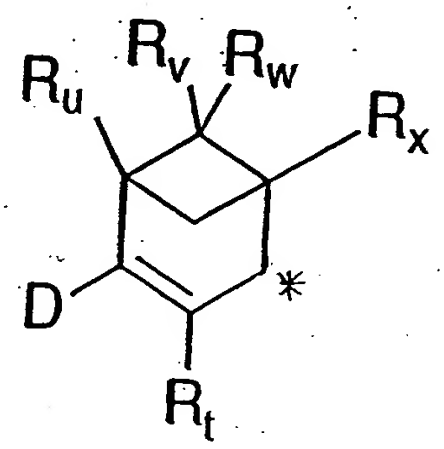


(formula A)

wherein X is selected from the group consisting of

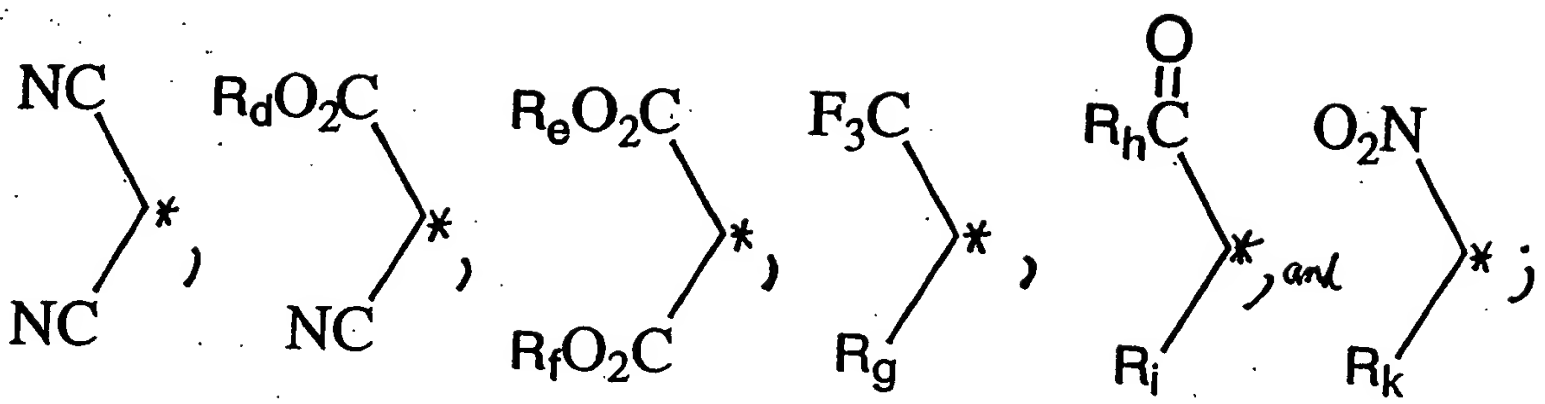


and



wherein D is selected from the group consisting of NR_aR_b, OR_a, SR_a, PR_aR_b, and R_c;

wherein A is selected from the group consisting of:



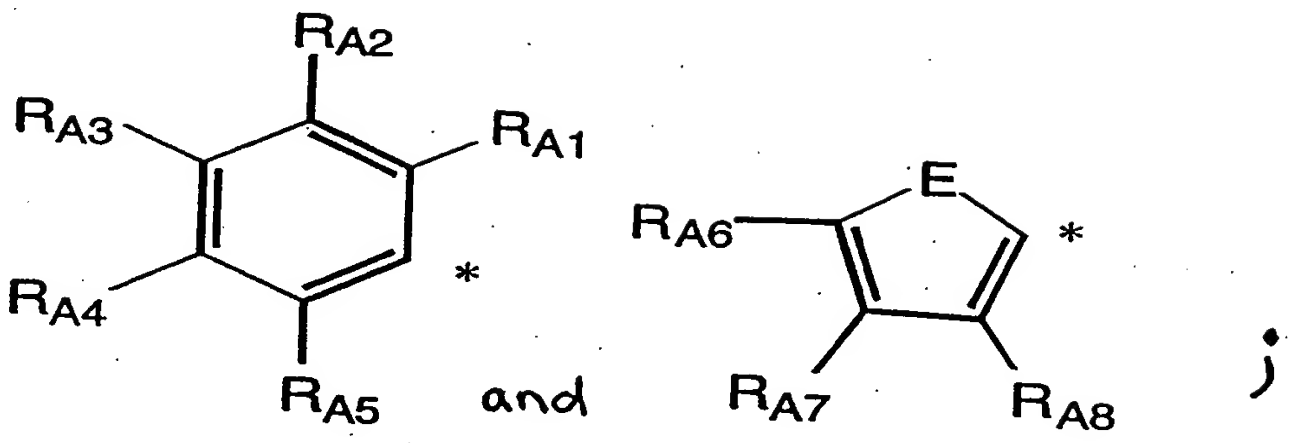
wherein R_a, R_b, and R_c are the same or different and are each independently selected from the group consisting of: H; a linear alkyl group; a branched alkyl group; a cyclic alkyl group;-$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group;

wherein R_d, R_e, R_f, R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_s, R_t, R_u, R_v, R_w, and R_x are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group; wherein the hydrocarbon group is saturated or unsaturated;

wherein R_g, R_h, R_i, and R_k are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$;-$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; an aryl group; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; -$CO_2R_d$; and -$COR_d$; wherein the hydrocarbon group is saturated or unsaturated;

wherein each aryl group is optionally independently selected from

the group consisting of



;

wherein R_{A1}, R_{A2}, R_{A3}, R_{A4}, R_{A5}, R_{A6}, R_{A7}, and R_{A8} are the same or different and are each independently selected from the group consisting of H, a linear alkyl group, a branched alkyl group, and a cyclic alkyl group;

wherein E is selected from the group consisting of S, O, and NR_s;

wherein the alkyl group is optionally substituted or unsubstituted and optionally includes up to 25 carbon atoms;

wherein α is an integer that is greater than or equal to 0 and less than or equal to 25;

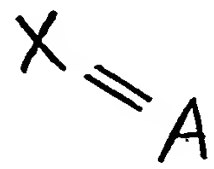
wherein β is an integer that is greater than or equal to 0 and less than or equal to 25; and

wherein γ is an integer that is greater than or equal to 0 and less than or equal to 25.

Claim 12. (original) A method as claimed in Claim 11, wherein an amount of the compound is added to and mixed with the liquid-crystal mixture to yield a resulting mixture, wherein the amount of the compound is less than or equal to about 50% by weight of

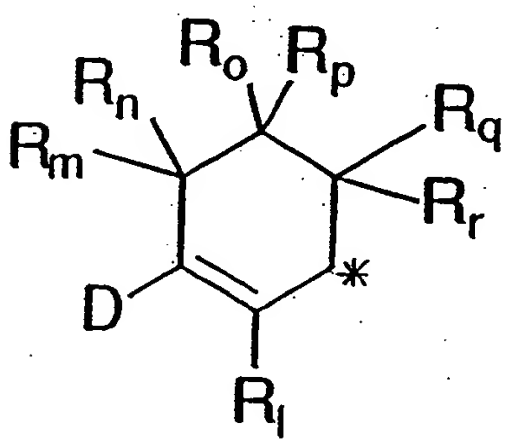
the resulting mixture.

Claim 13. (previously presented) A method for tuning a clearing temperature of a liquid-crystal mixture, the method comprising adding to the liquid-crystal mixture 1 a compound having a formula A:

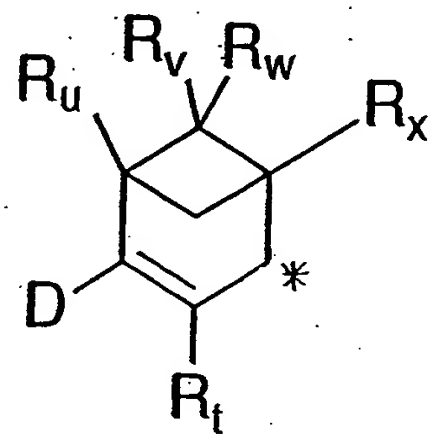


(formula A)

wherein X is selected from the group consisting of



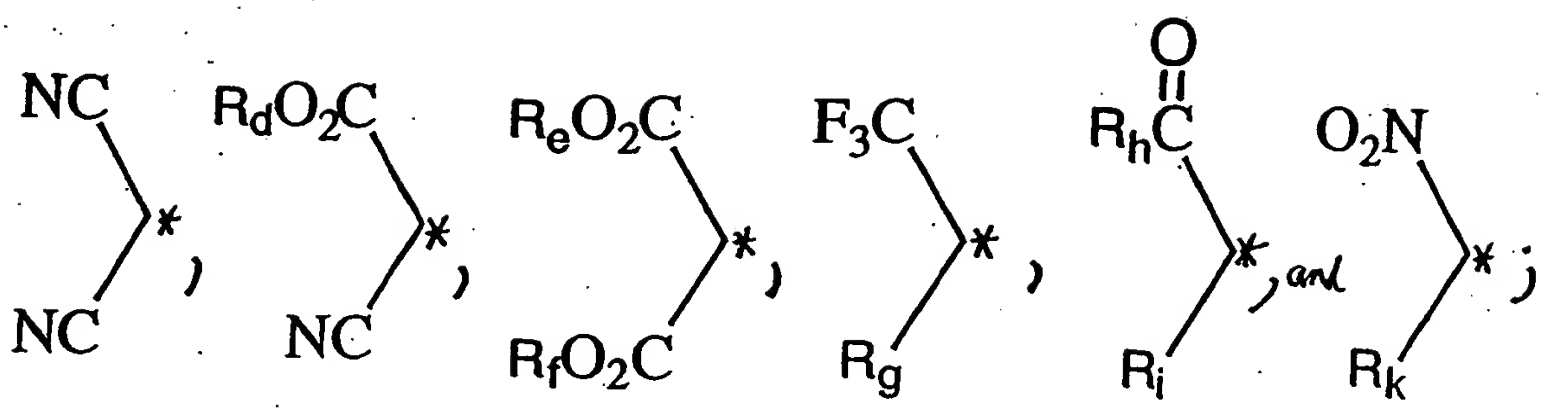
and



;

wherein D is selected from the group consisting of NR_aR_b, OR_a, SR_a, PR_aR_b, and R_c;

wherein A is selected from the group consisting of:



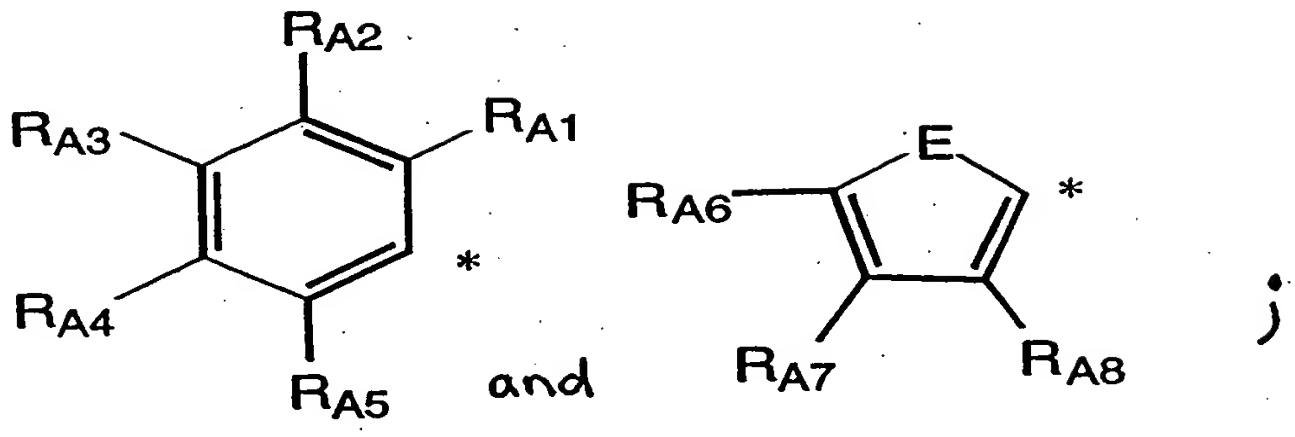
wherein R_a, R_b, and R_c are the same or different and are each independently selected from the group consisting of: H; a linear alkyl group; a branched alkyl group; a cyclic alkyl group;-$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group;

wherein R_d, R_e, R_f, R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_s, R_t, R_u, R_v, R_w, and R_x are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group; wherein the hydrocarbon group is saturated or unsaturated;

wherein R_g, R_h, R_i, and R_k are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$;-$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; an aryl group; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; -$CO_2R_d$; and -$COR_d$; wherein the hydrocarbon group is saturated or unsaturated;

wherein each aryl group is optionally independently selected from

the group consisting of



;

wherein R_{A1}, R_{A2}, R_{A3}, R_{A4}, R_{A5}, R_{A6}, R_{A7}, and R_{A8} are the same or different and are each independently selected from the group consisting of H, a linear alkyl group, a branched alkyl group, and a cyclic alkyl group;

wherein E is selected from the group consisting of S, O, and NR_s;

wherein the alkyl group is optionally substituted or unsubstituted and optionally includes up to 25 carbon atoms;

wherein α is an integer that is greater than or equal to 0 and less than or equal to 25;

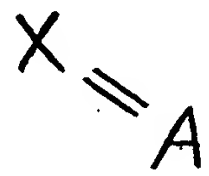
wherein β is an integer that is greater than or equal to 0 and less than or equal to 25; and

wherein γ is an integer that is greater than or equal to 0 and less than or equal to 25.

Claim 14. (original) A method as claimed in Claim 13, wherein an amount of the compound is added to and mixed with the liquid-crystal mixture to yield a resulting mixture, wherein the amount of the compound is less than or equal to about 50% by weight of

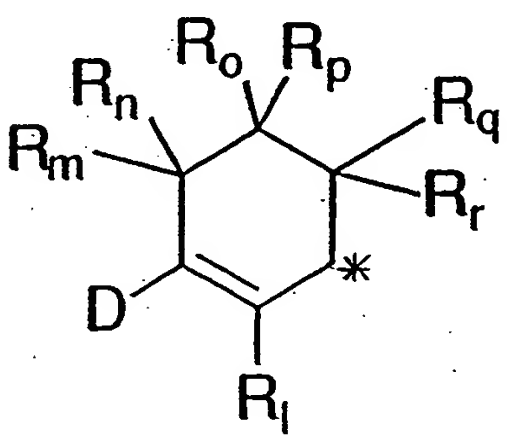
the resulting mixture.

Claim 15. (previously presented) A method for tuning birefringence of a liquid-crystal mixture, the method comprising adding to the liquid-crystal mixture a compound having a formula A:

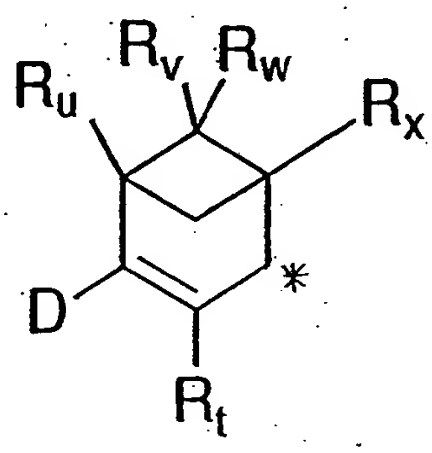


(formula A)

wherein X is selected from the group consisting of

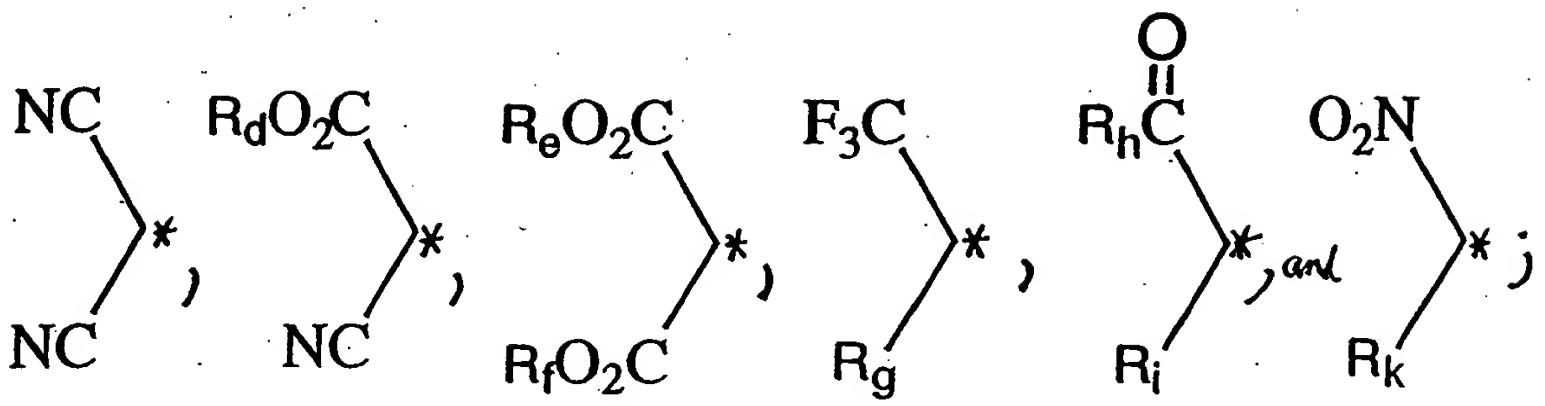


and



wherein D is selected from the group consisting of NR_aR_b, OR_a, SR_a, PR_aR_b, and R_c;

wherein A is selected from the group consisting of:



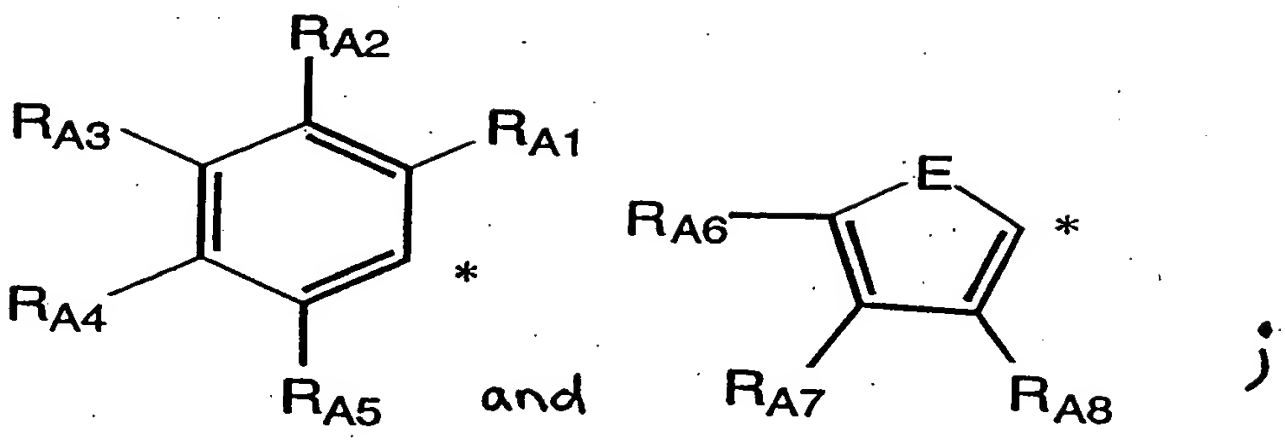
wherein R_a, R_b, and R_c are the same or different and are each independently selected from the group consisting of: H; a linear alkyl group; a branched alkyl group; a cyclic alkyl group;-$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group;

wherein R_d, R_e, R_f, R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_s, R_t, R_u, R_v, R_w, and R_x are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group; wherein the hydrocarbon group is saturated or unsaturated;

wherein R_g, R_h, R_i, and R_k are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$;-$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; an aryl group; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; -$CO_2R_d$; and -$COR_d$; wherein the hydrocarbon group is saturated or unsaturated;

wherein each aryl group is optionally independently selected from

the group consisting of



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wherein R_{A1}, R_{A2}, R_{A3}, R_{A4}, R_{A5}, R_{A6}, R_{A7}, and R_{A8} are the same or different and are each independently selected from the group consisting of H, a linear alkyl group, a branched alkyl group, and a cyclic alkyl group;

wherein E is selected from the group consisting of S, O, and NR_s;

wherein the alkyl group is optionally substituted or unsubstituted and optionally includes up to 25 carbon atoms;

wherein α is an integer that is greater than or equal to 0 and less than or equal to 25;

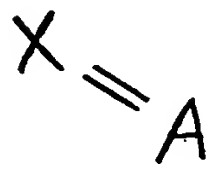
wherein β is an integer that is greater than or equal to 0 and less than or equal to 25; and

wherein γ is an integer that is greater than or equal to 0 and less than or equal to 25.

Claim 16. (original) A method as claimed in Claim 15, wherein an amount of the compound is added to and mixed with the liquid-crystal mixture to yield a resulting mixture, wherein the amount of the compound is less than or equal to about 50% by weight of the resulting mixture.

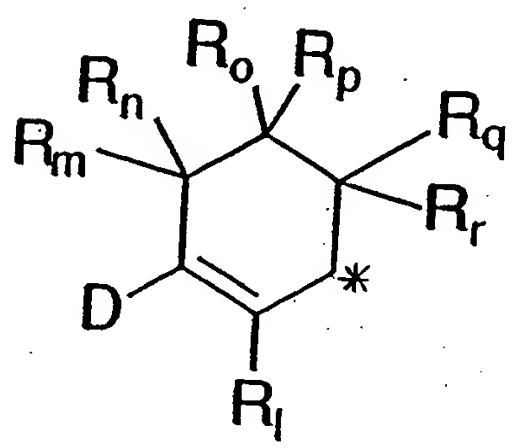
Claim 17. (previously presented) A method for increasing a $\partial n/\partial T$ of a liquid-crystal mixture, the method comprising adding a compound to the liquid-crystal mixture to yield a resulting mixture; wherein the resulting mixture at about 20-30°C has a $\partial n/\partial T$ larger than about 0.005, wherein n is a

refractive index of the resulting mixture and T is a temperature of the resulting mixture in °C; and wherein the compound has a formula A:

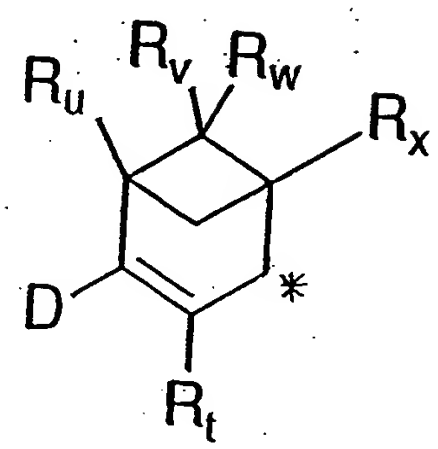


(formula A)

wherein X is selected from the group consisting of

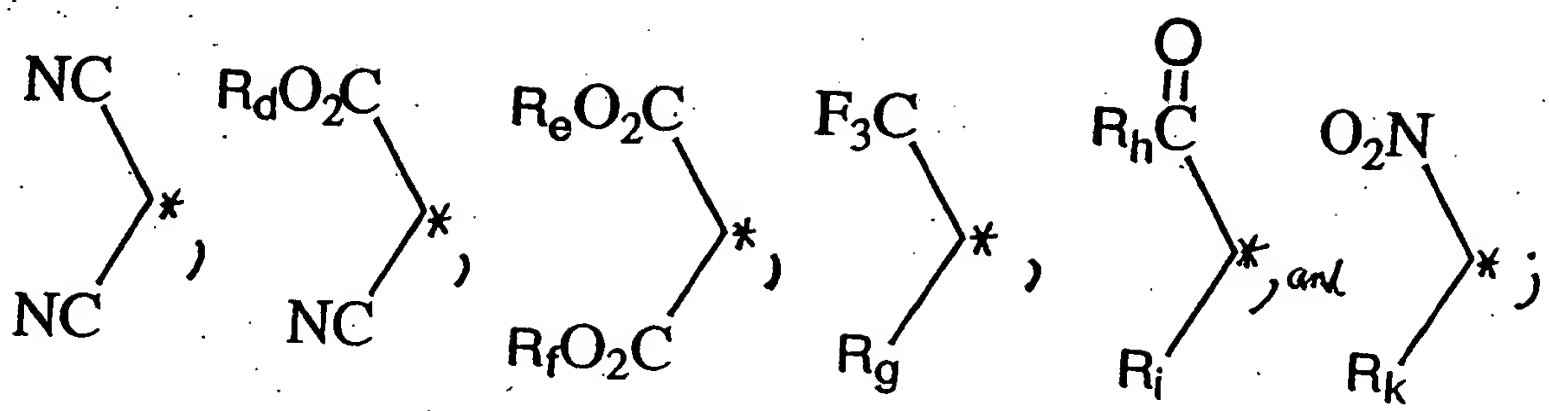


and



wherein D is selected from the group consisting of NR_aR_b, OR_a, SR_a, PR_aR_b, and R_c;

wherein A is selected from the group consisting of:



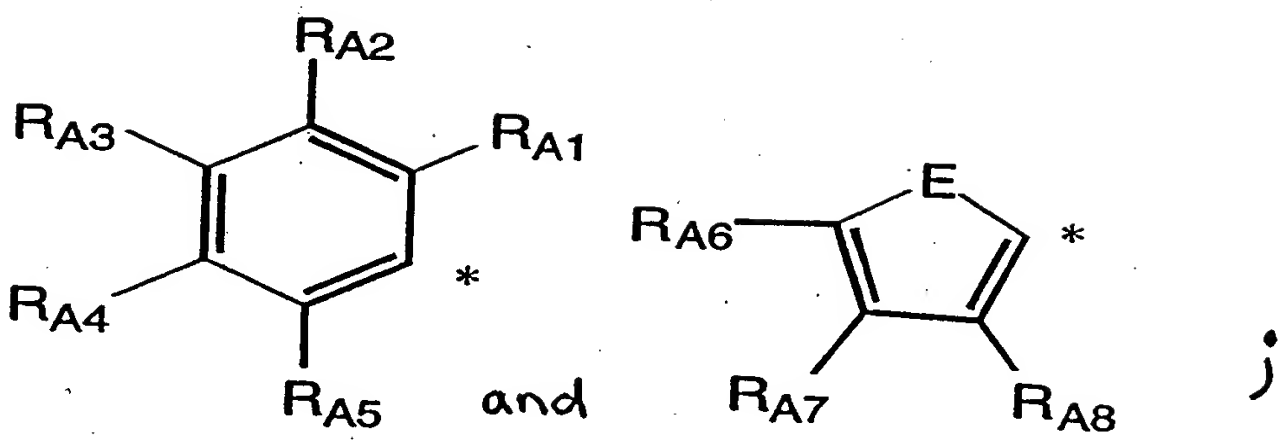
wherein R_a, R_b, and R_c are the same or different and are each independently selected from the group consisting of: H; a linear alkyl group; a branched alkyl group; a cyclic alkyl group;-$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group;

wherein R_d, R_e, R_f, R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_s, R_t, R_u, R_v, R_w, and R_x are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; and an aryl group; wherein the hydrocarbon group is saturated or unsaturated;

wherein R_g, R_h, R_i, and R_k are the same or different and are each independently selected from the group consisting of: H; a linear hydrocarbon group; a branched hydrocarbon group; a cyclic hydrocarbon group; a linear alkyl group; a branched alkyl group; a cyclic alkyl group; -$(CH_2CH_2O)_\alpha$–$(CH_2)_\beta OR_{A1}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta NR_{A2}R_{A3}$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta CN$;-$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Cl$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta Br$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta I$; -$(CH_2CH_2O)_\alpha$-$(CH_2)_\beta$-Phenyl; an aryl group; -$(CH_2)_\alpha(CF_2)_\gamma CF_3$; -$CO_2R_d$; and -$COR_d$; wherein the hydrocarbon group is saturated or unsaturated;

wherein each aryl group is optionally independently selected from

the group consisting of



;

wherein R_{A1}, R_{A2}, R_{A3}, R_{A4}, R_{A5}, R_{A6}, R_{A7}, and R_{A8} are the same or different and are each independently selected from the group consisting of H, a linear alkyl group, a branched alkyl group, and a cyclic alkyl group;

wherein E is selected from the group consisting of S, O, and NR_s;

wherein the alkyl group is optionally substituted or unsubstituted and optionally includes up to 25 carbon atoms;

wherein α is an integer that is greater than or equal to 0 and less than or equal to 25;

wherein β is an integer that is greater than or equal to 0 and less than or equal to 25; and

wherein γ is an integer that is greater than or equal to 0 and less than or equal to 25.

Claim 18. (original) A method as claimed in Claim 17, wherein an amount of the compound is added to and mixed with the liquid-crystal mixture to yield the resulting mixture, wherein the amount

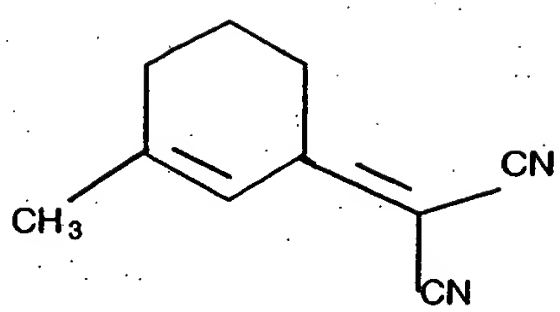
of the compound is less than or equal to about 50% by weight of the resulting mixture.

Claim 19. (cancelled)

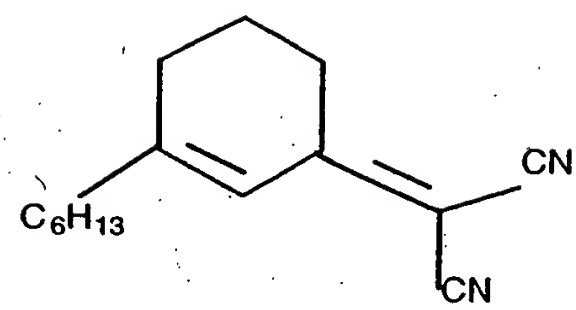
Claim 20. (original) A composition as claimed in Claim 9, wherein the composition is a liquid-crystal composition.

Claim 21. (previously presented) A composition as claimed in Claim 9, wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, and R_x are each H; wherein A is C(CN)(CN); and wherein D is R_y or OR_y, and wherein R_y is selected from the group consisting of the linear alkyl group, the branched alkyl group, the cyclic alkyl group, and the aryl group.

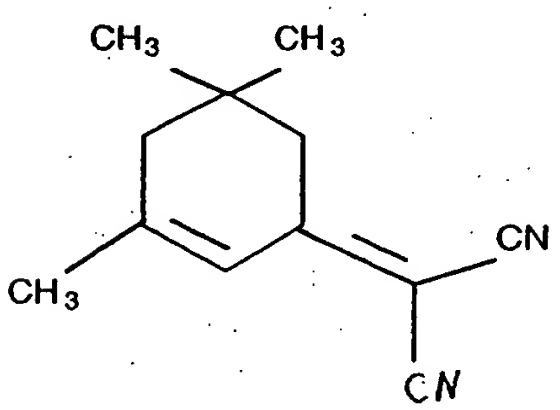
Claim 22. (previously presented) A composition as claimed in Claim 9, wherein the compound is selected from the group consisting of



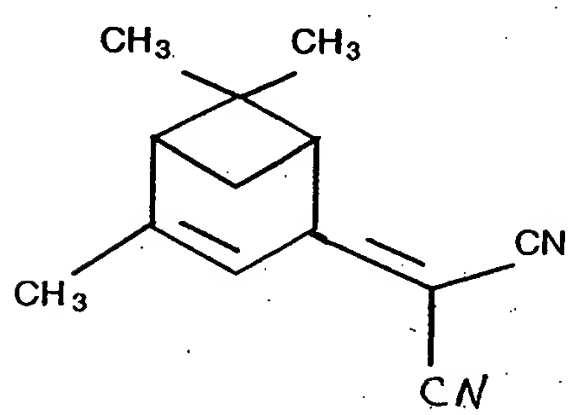
(I)



(II)

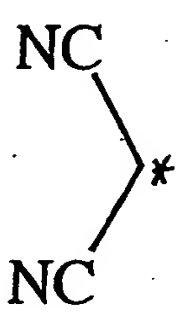
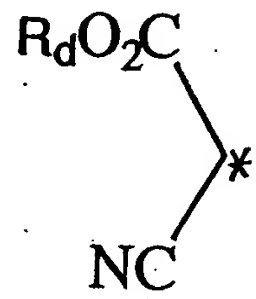


(III), and



(IV)

Claim 23. (previously presented) A composition as claimed in Claim 9, wherein A is selected from the group consisting of:

wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, R_x, and D are each independently selected from the group consisting of: H, methyl, ethyl, propyl, and butyl; and

wherein R_d is selected from the group consisting of methyl, ethyl, propyl, and butyl.

Claim 24. (previously presented) A composition as claimed in Claim 21, wherein the composition is a liquid-crystal composition.

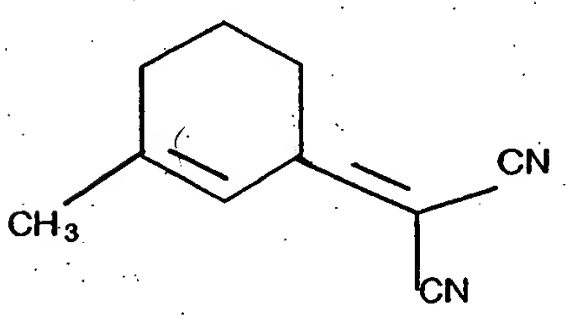
Claim 25. (previously presented) A composition as claimed in Claim 22, wherein the composition is a liquid-crystal composition.

Claim 26. (previously presented) A composition as claimed in Claim 23, wherein the composition is a liquid-crystal composition.

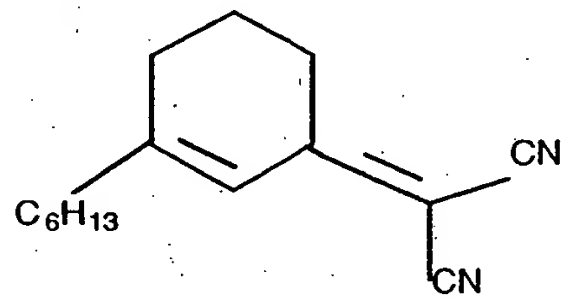
Claim 27. (previously presented) A method as claimed in Claim 11, wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, and R_x are

each H; wherein A is C(CN)(CN); and wherein D is R_y or OR_y, and wherein R_y is selected from the group consisting of the linear alkyl group, the branched alkyl group, the cyclic alkyl group, and the aryl group.

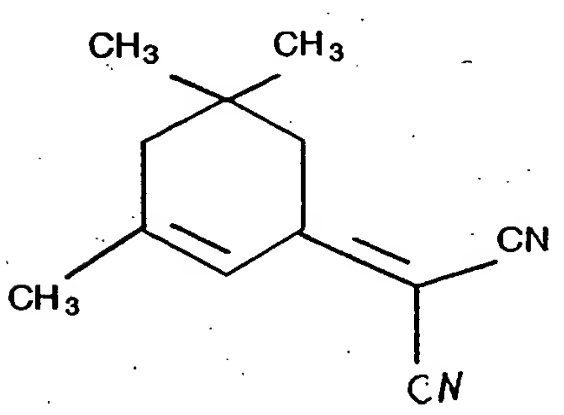
Claim 28. (previously presented) A method as claimed in Claim 11, wherein the compound is selected from the group consisting of



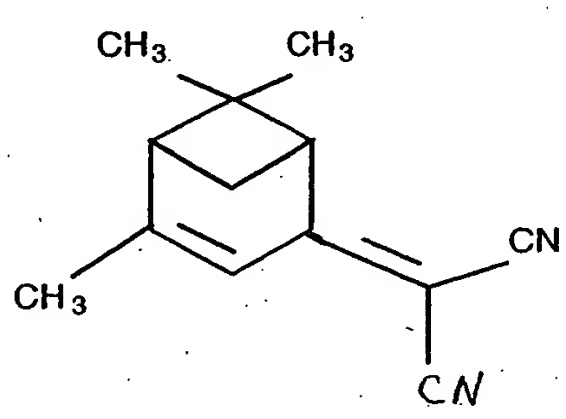
(I)



(II)

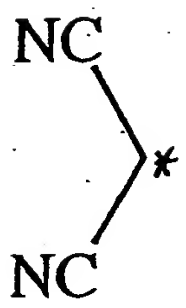


(III), and

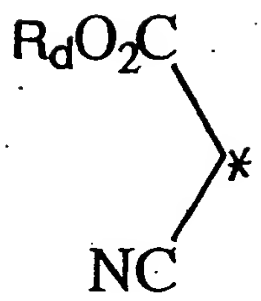


(IV)

Claim 29. (currently amended) A method as claimed in Claim 11, wherein A is selected from the group consisting of:



and



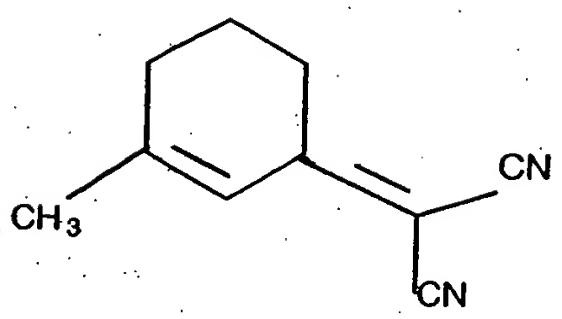
;

wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, R_x, and D are each independently selected from the group consisting of: H, methyl, ethyl, propyl, and butyl; and

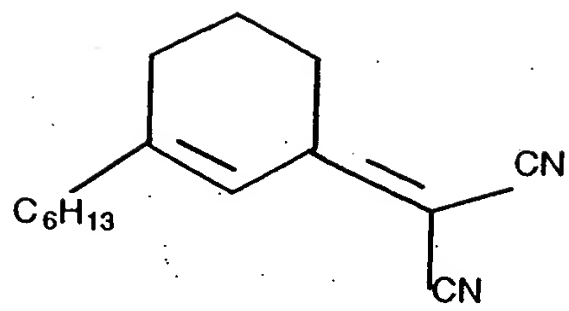
wherein R_d is selected from the group consisting of methyl, ethyl, propyl, and butyl.

Claim 30. (previously presented) A method as claimed in Claim 13, wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, and R_x are each H; wherein A is C(CN)(CN); and wherein D is R_y or OR_y, and wherein R_y is selected from the group consisting of the linear alkyl group, the branched alkyl group, the cyclic alkyl group, and the aryl group.

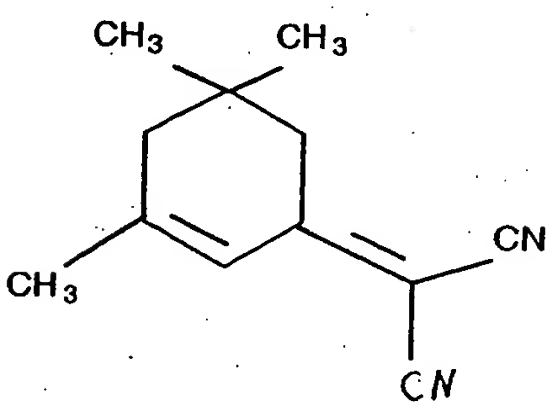
Claim 31. (previously presented) A method as claimed in Claim 13, wherein the compound is selected from the group consisting of



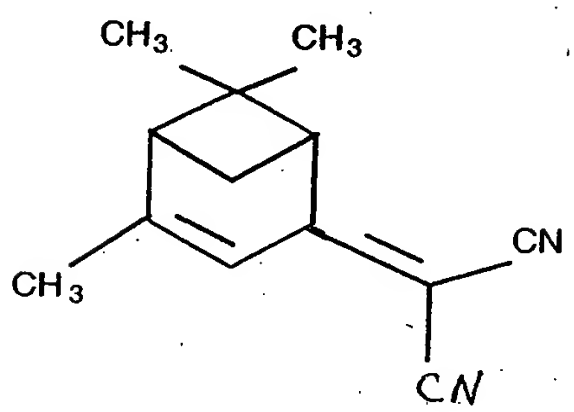
(I)



(II)



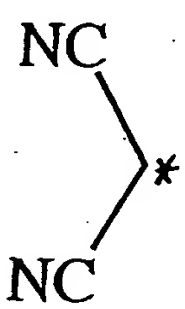
(III), and



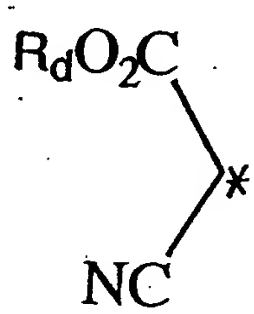
(IV)

Claim 32. (previously presented) A method as claimed in Claim 13,

wherein A is selected from the group consisting of:



and



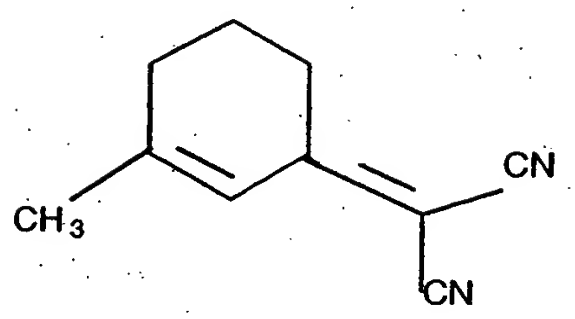
;

wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, R_x, and D are each independently selected from the group consisting of: H, methyl, ethyl, propyl, and butyl; and

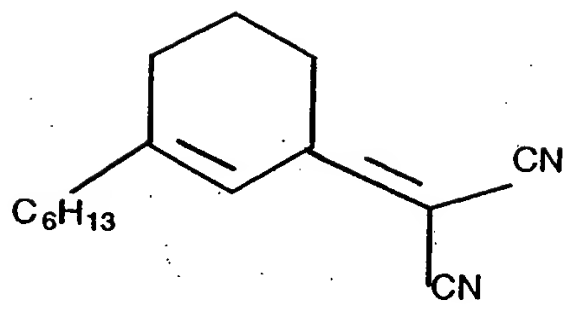
wherein R_d is selected from the group consisting of methyl, ethyl, propyl, and butyl.

Claim 33. (previously presented) A method as claimed in Claim 15, wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, and R_x are each H; wherein A is C(CN)(CN); and wherein D is R_y or OR_y, and wherein R_y is selected from the group consisting of the linear alkyl group, the branched alkyl group, the cyclic alkyl group, and the aryl group.

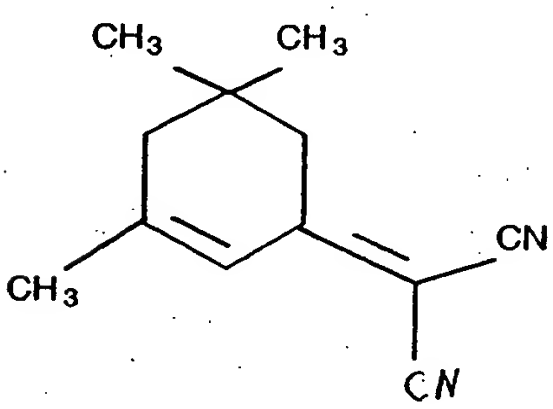
Claim 34. (previously presented) A method as claimed in Claim 15, wherein the compound is selected from the group consisting of



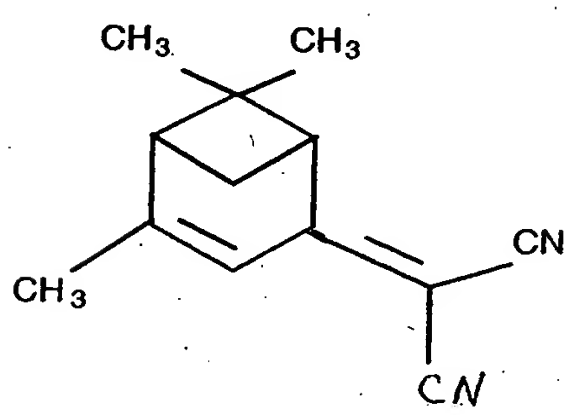
(I)



(II)

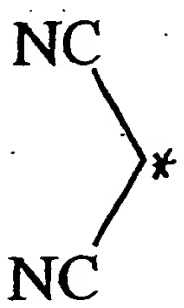


(III), and

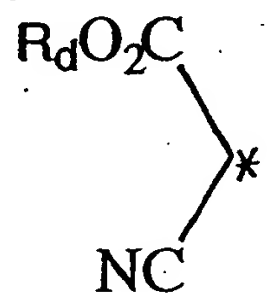


(IV)

Claim 35. (currently amended) A method as claimed in Claim 15, wherein A is selected from the group consisting of:



and



;

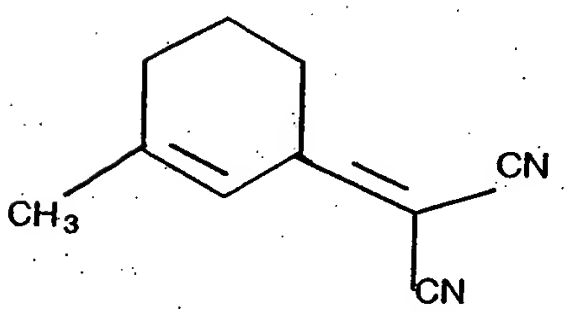
wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, R_x, and D are each indepen-

dently selected from the group consisting of: H, methyl, ethyl, propyl, and butyl; and

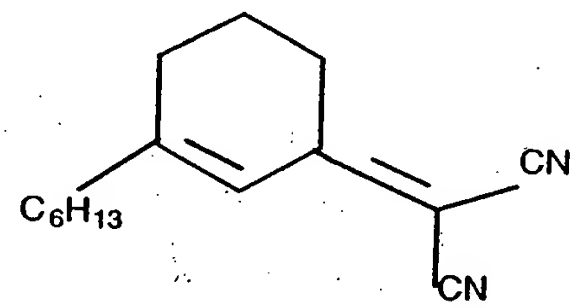
wherein R_d is selected from the group consisting of methyl, ethyl, propyl, and butyl.

Claim 36. (previously presented) A method as claimed in Claim 17, wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, and R_x are each H; wherein A is C(CN)(CN); and wherein D is R_y or OR_y, and wherein R_y is selected from the group consisting of the linear alkyl group, the branched alkyl group, the cyclic alkyl group, and the aryl group.

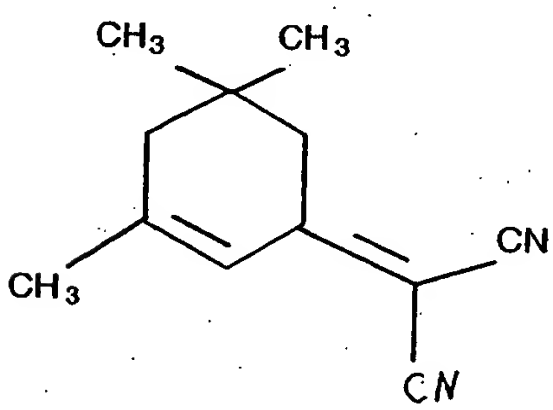
Claim 37. (previously presented) A method as claimed in Claim 17, wherein the compound is selected from the group consisting of



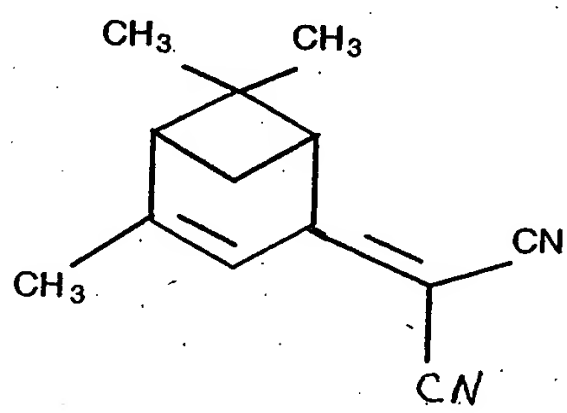
(I),



(II),



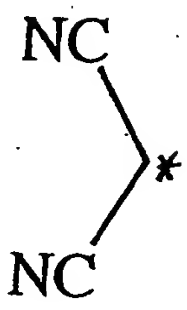
(III), and



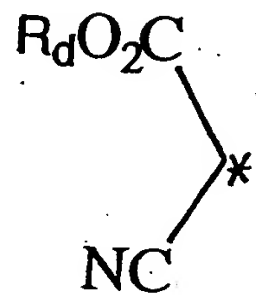
(IV).

Claim 38. (previously presented) A method as claimed in Claim 17,

wherein A is selected from the group consisting of:



and



;

wherein R_l, R_m, R_n, R_o, R_p, R_q, R_r, R_t, R_u, R_v, R_w, R_x, and D are each independently selected from the group consisting of: H, methyl, ethyl, propyl, and butyl; and

wherein R_d is selected from the group consisting of methyl, ethyl, propyl, and butyl.

Claims 39-75. (cancelled)

Claim 76. (previously presented) The composition as claimed in Claim 9, wherein the compound is colorless or virtually colorless.

Claim 77. (previously presented) The composition as claimed in Claim 9, wherein the compound has an absorption loss in a visible spectrum at approximately 20-30°C of greater than or equal to 0% and less than or equal to about 5%.

Claim 78. (previously presented) The composition as claimed in Claim 9, wherein the compound has an absorption loss in a visible spectrum at approximately 20-30°C of greater than or equal to 0% and less than or equal to about 1%.

Claim 79. (previously presented) The composition as claimed in Claim 9, wherein the compound has an absorption loss in a visible spectrum at approximately 20-30°C of greater than or equal to 0% and less than or equal to about .01%.

Claims 80-84. (cancelled)

Claim 85. (previously presented) The composition as claimed in Claim 9, wherein A is C(CN)(CN).

Claim 86. (previously presented) The method as claimed in Claim 11, wherein A is C(CN)(CN).

Claim 87. (previously presented) The method as claimed in Claim 13, wherein A is C(CN)(CN).

Claim 88. (previously presented) The method as claimed in Claim 15, wherein A is C(CN)(CN).

Claim 89. (previously presented) The method as claimed in Claim 17, wherein A is C(CN)(CN).

Claim 90. (currently amended) The composition as claimed in Claim ~~42~~ 23, wherein A is C(CN)(CN).

Claim 91. (currently amended) The method as claimed in Claim ~~43~~

29, wherein A is C(CN)(CN).

Claim 92. (currently amended) The method as claimed in Claim ~~44~~ 32, wherein A is C(CN)(CN).

Claim 93. (currently amended) The method as claimed in Claim ~~45~~ 35, wherein A is C(CN)(CN).

Claim 94. (currently amended) The method as claimed in Claim ~~46~~ 38, wherein A is C(CN)(CN).

Claim 95. (currently amended) The composition as claimed in Claim ~~47~~ 10, wherein A is C(CN)(CN).

Claim 96. (currently amended) The method as claimed in Claim ~~48~~ 12, wherein A is C(CN)(CN).

Claim 97. (currently amended) The method as claimed in Claim ~~49~~ 14, wherein A is C(CN)(CN).

Claim 98. (currently amended) The method as claimed in Claim ~~50~~ 16, wherein A is C(CN)(CN).

Claim 99. (currently amended) The method as claimed in Claim ~~51~~ 18, wherein A is C(CN)(CN).

Claim 100. (currently amended) The ~~compound~~ composition as claimed in Claim ~~72~~ 20, wherein A is C(CN)(CN).

Claim 101. (currently amended) The ~~compound~~ composition as claimed in Claim ~~73~~ 24, wherein A is C(CN)(CN).

Claim 102. (currently amended) The ~~compound~~ composition as claimed in Claim ~~74~~ 25, wherein A is C(CN)(CN).

Claim 103. (currently amended) The ~~compound~~ composition as claimed in Claim ~~75~~ 26, wherein A is C(CN)(CN).

Claim 104. (previously presented) The composition as claimed in Claim 76, wherein A is C(CN)(CN).

Claim 105. (previously presented) The composition as claimed in Claim 77, wherein A is C(CN)(CN).

Claim 106. (previously presented) The composition as claimed in Claim 78, wherein A is C(CN)(CN).

Claim 107. (previously presented) The composition as claimed in Claim 79, wherein A is C(CN)(CN).

Claims 108-122. (cancelled)